Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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June 18, 2010

Mr. Scott Durward
Willow Creek Gathering, LLC
NFR Energy
4100 First Street West
Havre, MT 59501

Dear Mr. Durward:

Montana Air Quality Permit #3060-06 is deemed final as of June 18, 2010, by the Department of Environmental Quality (Department). This permit is for a natural gas compressor station (Blaine County #4 Compressor Station). All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Skye Hatten, P.E.
Environmental Engineer
Air Resources Management Bureau
(406) 444-5287

VW:SH
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3060-06

Willow Creek Gathering, LLC
4100 First Street West
Havre, MT 59501

June 18, 2010

MONTANA AIR QUALITY PERMIT

Issued To: Willow Creek Gathering, LLC
Blaine County #4 Compressor Station
P.O. Box 40
Havre, MT 59501

Montana Air Quality Permit: #3060-06
Administrative Amendment (AA)
Request Received: 01/15/2010 & 05/25/2010
Department Decision on AA: 06/02/2010
Permit Final: 06/18/2010
AFS #: 005-0010

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Willow Creek Gathering, LLC (WCG), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

WCG owns and operates a natural gas compressor station known as the Blaine County #4 Compressor Station. The facility is located in the SW¼ of Section 8, Township 33 North, Range 19 East, in Blaine County, Montana. A complete list of the permitted equipment is contained in Section I.A of the Permit Analysis.

B. Current Permit Action

On January 15, 2010, the Department of Environmental Quality (Department) received a request from WCG for a company name change via administrative amendment from KOB General Partnership (KOB) to WCG. On May 25, 2010, the Department received a request from WCG to remove the 2,400 horsepower (hp) compressor engine #8 from the permit. The current permit action changes the company name as requested and removes all references to the 2,400-hp compressor engine #8 from the permit. In addition to accounting for these changes, the permit updates the rule references, permit format, and the emissions inventory.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. The maximum rated design capacity of compressor engine #6 shall not exceed 1,341-brake horsepower (bhp) (ARM 17.8.749).

2. Compressor engine #6 shall be a 4-stroke lean-burn engine with oxidation catalyst and electronic AFR controller. The pound per hour (lb/hr) emission limits for the 1,341-bhp lean-burn engine shall be determined using the following equation and pollutant specific gram per brake-horsepower-hour (g/bhp-hr) emission factors (ARM 17.8.752):

Equation
Emission Limit (lb/hr) = Emission Factor (g/bhp-hr) * maximum rated design capacity of engine (bhp) * 0.002205 lb/gram

Emission Factors

Oxides of Nitrogen (NO_x):	1.0 g/bhp-hr
Carbon Monoxide (CO):	0.5 g/bhp-hr
Volatile Organic Compounds (VOC):	1.0 g/bhp-hr

3. The maximum rated design capacity of compressor engine #7 shall not exceed 1,341-bhp (ARM 17.8.749).

4. Compressor engine #7 shall be a 4-stroke lean-burn engine with an oxidation catalyst and electronic AFR controller. The lb/hr emission limits for the 1,341-bhp lean-burn engine shall be determined using the following equation and pollutant specific g/bhp-hr emission factors (ARM 17.8.752):

   Equation
   Emission Limit (lb/hr) = Emission Factor (g/bhp-hr) * maximum rated design capacity of engine (bhp) * 0.002205 lb/gram

   Emission Factors

NO_x:	1.0 g/bhp-hr
CO:	0.5 g/bhp-hr
VOC:	1.0 g/bhp-hr

5. The 60-kilowatt (kW) Generac generator (80 horsepower (hp) engine) shall only be used as a backup generator or in emergency situations (ARM 17.8.749).

6. WCG shall operate all equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.749).

7. Compressor engine #6, compressor engine #7, and the triethylene glycol (TEG) dehydrator reboiler shall combust only pipeline quality natural gas (ARM 17.8.752).

8. WCG shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304).

9. WCG shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

10. WCG shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.11 (ARM 17.8.749).

11. WCG shall comply with any applicable standards and limitations, reporting, recordkeeping and notification requirements contained in 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (ARM 18.7.342; 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. WCG shall initially test compressor engine #6 (maximum design capacity 1,341 bhp) for NO_x and CO, concurrently, to demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.2. The initial source testing shall be conducted within 180 days of the initial start-up date of compressor engine #6. After the initial source test, additional testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).

2. WCG shall initially test compressor engine #7 (maximum design capacity 1,341 bhp) for NO_x and CO, concurrently, to demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.4. The initial source testing shall be conducted within 180 days of the initial start-up date of compressor engine #7. After the initial source test, additional testing shall continue on an every four-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).

3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

4. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. WCG shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505). WCG shall submit the following information annually to the Department by March 1 of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505).

   a. Hours of operation for the 60-kW Generac generator; and

   b. A summary report listing the reasons the 60-kW Generac generator was operating.

2. WCG shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit,*** change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by WCG as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – WCG shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if WCG fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving WCG of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.

E. Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by WCG may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762)

Montana Air Quality Permit (MAQP) Analysis
Willow Creek Gathering, LLC
MAQP #3060-06

I. Introduction/Process Description

Willow Creek Gathering, LLC (WCG) owns and operates a natural gas compressor station. The facility is located in the SW¼ of Section 8, Township 33 North, Range 19 East, of Blaine County, Montana, and is known as the Blaine County #4 Compressor Station.

A. Permitted Equipment

The facility consists of the following equipment and materials:

- (2) 1,341 brake-horsepower (bhp) natural gas-fired 4-stroke lean-burn compressor engines equipped with an oxidation catalysts and air-to-fuel ratio (AFR) controllers
- (2) 0.3-million British thermal units per hour (MMBtu/hr) triethylene glycol (TEG) dehydrators
- (4) Natural gas space heaters
- (2) Glycol dehydrator Vent Stack
- (1) 60-kilowatt (kW) Generac generator (80 horsepower (hp) engine) to be used as an emergency back-up generator

B. Source Description

The Blaine County #4 Compressor Station utilizes three lean-burn compressor engines to gather, compress, and transmit natural gas through a natural gas pipeline.

C. Permit History

On November 20, 1999, the Department of Environmental Quality (Department) issued Havre Pipeline Company, LLC (HPC) **MAQP #3060-00** for the operation of the Blaine County #4 Compressor Station and associated equipment.

On March 15, 2001, the Department issued MAQP #3060-01 to HPC. The permit was a modification of MAQP #3060-00. HPC requested to add a 60-kW Generac emergency generator to their permitted equipment. HPC requested the generator be added to the permit as a de minimis source. The Department added the 60-kW Generac generator to MAQP #3060-00 and updated the permit to reflect current permit format and rule references. **MAQP #3060-01** replaced MAQP #3060-00.

On August 23, 2004, the Department received a request to change the corporate name on MAQP #3060-01 from HPC to KOB-Louisiana Corporation (KOB-LC). The current permit action changed the corporate name on MAQP #3060-01 from HPC to KOB-LC, and updated the permit to reflect current permit language and rule references used by the Department. **MAQP #3060-02** replaced MAQP #3060-01.

On July 18, 2005, the Department received a transfer of ownership request to transfer the permit ownership from KOB-LC to KOB General Partnership (KOB). The permit was also updated to reflect current permit language and rule references used by the Department. **MAQP #3060-03** replaced MAQP #3060-02.

On August 8, 2006, the Department received a complete application for the modification of MAQP #3060-03. KOB's request included the installation of two lean-burn compressor engines with a maximum rated design capacity equal to or less than 1,341 bhp each with oxidation catalysts and AFR controllers. In addition, KOB requested to install a second tri-ethylene glycol (TEG) dehydrator and associated 0.30 MMBtu/(hr) reboiler and still vent, and to remove the 2,400 bhp Caterpillar G3608 TA compressor engine from the permit. **MAQP #3060-04** replaced MAQP #3060-03.

On October 27, 2006, the Department received a complete application from KOB for the modification of MAQP #3060-04. KOB requested the installation of a lean-burn compressor engine with a maximum rated design capacity equal to or less than 2,400 bhp equipped with an oxidation catalyst and AFR controller. Also, the testing requirements for engine #6 and engine #7 were changed and the reporting requirement for the backup generator was changed. **MAQP #3060-05** replaced MAQP #3060-04.

D. Current Permit Action

On January 15, 2010, the Department received a request from WCG for a company name change via administrative amendment from KOB to WCG. On May 25, 2010, the Department received a request from WCG to remove the 2,400-hp compressor engine #8 from the permit. The current permit action changes the company name as requested and removes all references to the 2,400-hp compressor engine #8 from the permit. In addition to accounting for these changes, the permit updates the rule references, permit format, and the emissions inventory. **MAQP #3060-06** replaces MAQP #3060-05.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

   WCG shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

WCG must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter (PM). (2) Under this rule, WCG shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. WCG will burn pipeline quality natural gas in the compressor engine, which will meet this limitation.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. A major source of Hazardous Air Pollutants (HAPs), as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as applicable, including the following subparts:

    a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:

    b. 40 CFR 63, Subpart HH — National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major or minor source of hazardous air pollutants (HAPs) as defined in 40 CFR 63.761. Second, a facility that is determined to be major for HAPs must also either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer, or process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Third, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(4) of 40 CFR 63.760. Finally, if the first three criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR 63.760 do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HH. Based on the information submitted by WCG, the Blaine County #4 Compressor Station is subject to the provisions of 40 CFR 63, Subpart HH because the facility is an area source of HAPs and it contains a triethylene glycol dehydration unit, which is considered an affected source pursuant to paragraph (b)(2) of 40 CFR 63, Subpart HH.

    c. 40 CFR Part 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part

63, shall comply with the standards and provisions of 40 CFR 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR 63, Subpart HHH requirements, certain criteria must be met. First, the facility must transport or store natural gas prior to the gas entering the pipeline to a local distribution company or to a final end user if there is no local distribution company. In addition, the facility must be a major source of HAPs as determined using the maximum natural gas throughput as calculated in either paragraphs (a)(1) and (a)(2) or paragraphs (a)(2) and (a)(3) of 40 CFR 63, Subpart HHH. Second, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR 63, Subpart HHH. Finally, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HHH. Based on the information submitted by WCG, the Blaine County #4 Compressor Station is not subject to the provisions of 40 CFR 63, Subpart HHH because the facility is not a major source of HAPs.

d. 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. An owner or operator who owns or operates a stationary RICE at a major or area source of HAP emissions is subject to this subpart. Therefore, WCG is subject to this subpart.

D. ARM 17.8, Subchapter 4 – Stack Height and Dispersion Techniques, including, but not limited to:

1. ARM 17.8.401 Definitions. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.402 Requirements. WCG must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP).

E. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

F. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. WCG has a PTE greater than 25 tons per year of nitrogen oxides (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO); therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this Permit Analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving WCG of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

G. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

H. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

   a. PTE > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3060-06 for WCG, the following conclusions were made:

a. The facility's PTE is less than 100 tons/year for any pollutant.

b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.

c. This source is not located in a serious PM_{10} nonattainment area.

d. This facility is not subject to any current NSPS.

e. This facility is subject to area source provisions of current NESHAP standards (40 CFR 63, Subpart HH; in addition, 40 CFR 63, Subpart ZZZZ is relevant to this source but currently has no applicable rules).

f. This source is not a Title IV affected source, nor a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that WCG is a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or modified source. WCG shall install on a new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was not required for the current permit action because the permit action is considered an administrative permit action.

IV. Emission Inventory

Ton/year					
Source	PM_{10}	NO_x	VOC	CO	SO_x
Compressor Engine #6 1,341-hp	0.44	12.95	12.95	6.48	0.026
Compressor Engine #7 1,341-hp	0.44	12.95	12.95	6.48	0.026
TEG Dehydrator Reboiler	0.01	0.13	0.01	0.11	0.001
TEG Dehydrator Reboiler	0.01	0.13	0.01	0.11	0.001
Natural Gas-Fired Space Heater	0.00	0.04	0.00	0.02	0.00
Dehydrator Still Vent	0.00	0.00	3.56	0.00	0.00
Dehydrator Still Vent	0.00	0.00	3.56	0.00	0.00
Emergency Generator (60 kW)	0.00	0.55	0.01	0.93	0.00
Total	1.28	49.92	44.64	25.72	0.077

Compressor Engine #6: 1,341-bhp capacity 4-Stroke Lean-Burn Compressor Engine

Fuel Heating Value: 1,000 MMBtu/MMScf (Company Information)
Fuel Consumption Rate: 10.11 MMBtu/hr (Company Information)

NO_x Emissions:

Emission Factor: 1.0 g/hp-hr (BACT Determination)
Calculations: 1.0 g/hp-hr * 0.002205 lb/g * 1341 hp = 2.96 lb/hr
2.96 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 12.95 ton/yr

CO Emissions:

Emission Factor: 0.5 g/hp-hr (BACT Determination)
Calculations: 0.5 g/hp-hr * 0.002205 lb/g * 1341 hp = 1.48 lb/hr
1.48 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 6.48 ton/yr

VOC Emissions:

Emission Factor: 1.0 g/hp-hr (BACT Determination)
Calculations: 1.0 g/hp-hr * 0.002205 lb/g * 1085 hp = 2.96 lb/hr
2.96 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 12.95 ton/yr

SO_2 Emissions:

Emission Factor: 0.000588 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Calculations: 0.000588 lb/MMBtu * 10.11 MMBtu/hr = 0.0059 lb/hr
0.0059 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.026 ton/yr

PM Emissions (PM emissions include PM_{10} and $PM_{2.5}$, both condensable and filterable):

Emission Factor: 0.00991 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Calculations: 0.00991 lb/MMBtu * 10.11 MMBtu/hr = 0.10 lb/hr
0.10 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.44 ton/yr

HAP Emissions (HAP emissions include formaldehyde):

Emission Factor: 0.072 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Calculations: 0.072 lb/MMBtu * 10.11 MMBtu/hr = 0.73 lb/hr
0.73 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.19 ton/yr

Compressor Engine #7: 1,341-bhp capacity 4-Stroke Lean-Burn Compressor Engine

Fuel Heating Value: 1,000 MMBtu/MMScf (Company Information)
Fuel Consumption Rate: 10.11 MMBtu/hr (Company Information)

NO_x Emissions:

Emission Factor: 1.0 g/hp-hr (BACT Determination)
Calculations: 1.0 g/hp-hr * 0.002205 lb/g * 1341 hp = 2.96 lb/hr
2.96 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 12.95 ton/yr

CO Emissions:

Emission Factor: 0.5 g/hp-hr (BACT Determination)
Calculations: 0.5 g/hp-hr * 0.002205 lb/g * 1341 hp = 1.48 lb/hr
1.48 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 6.48 ton/yr

VOC Emissions:

Emission Factor: 1.0 g/hp-hr (BACT Determination)
Calculations: 1.0 g/hp-hr * 0.002205 lb/g * 1085 hp = 2.96 lb/hr
2.96 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 12.95 ton/yr

SO_2 Emissions:

Emission Factor: 0.000588 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Calculations: 0.000588 lb/MMBtu * 10.11 MMBtu/hr = 0.0059 lb/hr
0.0059 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.026 ton/yr

PM Emissions (PM emissions include PM_{10} and $PM_{2.5}$, both condensable and filterable):

Emission Factor: 0.00991 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Calculations: 0.00991 lb/MMBtu * 10.11 MMBtu/hr = 0.10 lb/hr
0.10 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.44 ton/yr

HAP Emissions (HAP emissions include formaldehyde):

Emission Factor: 0.072 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Calculations: 0.072 lb/MMBtu * 10.11 MMBtu/hr = 0.73 lb/hr
0.73 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.19 ton/yr

TEG Dehydrator

VOC Emissions

Emission Factor: 0.8126 lb/hr (GRI-GLYCalc, Version 4.0)
Calculations: 0.8126 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.56 ton/yr

TEG Dehydrator Reboiler

Fuel Heating Value: 1,000 MMBtu/MMScf (Company Information)
Fuel Consumption Rate: 0.30 MMBtu/hr (Company Information)

NO_x Emissions:

Emission Factor: 0.098 lb/MMscf (AP-42, Table 1.4-1, 7/98)
Calculations: 0.098 lb/MMscf * 0.001 MMscf/MMBtu * 0.30 MMBtu/hr = 2.94 E-05 lb/hr
2.94E-05 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.29E-04 ton/yr

CO Emissions:

Emission Factor: 0.082 lb/MMscf (AP-42, Table 1.4-1, 7/98)
Calculations: 0.082 lb/MMscf * 0.001 MMscf/MMBtu * 0.30 MMBtu/hr = 2.46 E-05 lb/hr
2.46 E-05 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.08 E-04 ton/yr

VOC Emissions:

Emission Factor: 5.39 E-03 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 5.39 E-03 lb/MMscf * 0.001 MMscf/MMBtu * 0.30 MMBtu/hr = 1.62 E-06 lb/hr
1.62 E-06 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 7.10 E-06 ton/yr

SO_2 Emissions:

Emission Factor: 5.88 E-04 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 5.88 E-04 lb/MMscf * 0.001 MMscf/MMBtu * 0.30 MMBtu/hr = 1.76 E-07 lb/hr
1.76 E-07 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 7.71 E-07 ton/yr

PM_{10} Emissions:

Emission Factor: 7.45 E-03 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 7.45 E-03 lb/MMscf * 0.001 MMscf/MMBtu * 0.30 MMBtu/hr = 2.23 E-06 lb/hr
2.23 E-06 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 9.76 E-06 ton/yr

Natural Gas Fired Space Heater

Fuel Heating Value: 1,000 MMBtu/MMScf (Company Information)
Fuel Consumption Rate: 0.10 MMBtu/hr (Company Information)

NO_x Emissions:

Emission Factor: 94 lb/MMscf (AP-42, Table 1.4-1, 7/98)
Calculations: 94 lb/MMscf * 0.001 MMscf/MMBtu * 0.10 MMBtu/hr = 9.4 E-03 lb/hr
9.4 E-03 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.04 ton/yr

CO Emissions:

Emission Factor: 40 lb/MMscf (AP-42, Table 1.4-1, 7/98)
Calculations: 40 lb/MMscf * 0.001 MMscf/MMBtu * 0.10 MMBtu/hr = 4.0 E-03 lb/hr
4.0 E-03 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

VOC Emissions:

Emission Factor: 5.5 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 5.5 lb/MMscf * 0.001 MMscf/MMBtu * 0.10 MMBtu/hr = 5.5 E-04 lb/hr
5.5 E-04 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 2.41 E-03 ton/yr

SO_2 Emissions:

Emission Factor: 0.6 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 0.6 lb/MMscf * 0.001 MMscf/MMBtu * 0.10 MMBtu/hr = 6.0 E-05 lb/hr
6.0 E-05 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 2.63 E-04 ton/yr

PM_{10} Emissions:

Emission Factor: 7.6 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 7.6 lb/MMscf * 0.001 MMscf/MMBtu * 0.10 MMBtu/hr = 7.6 E-04 lb/hr
7.6 E-04 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.33 E-03 ton/yr

60 kw (80 hp) Generac Emergency Generator (4-Stroke, Rich-Burn)

Fuel Heating Value: 1,000 MMBtu/MMScf (Company Information)
Fuel Consumption Rate: 1 MMBtu/hr (Company Information)

NO_x Emissions:

Emission Factor: 2,210 lb/MMscf (AP-42, Table 3.2-3, 7/00)
Calculations: 2,210 lb/MMscf * 0.001 MMscf/MMBtu * 1 MMBtu/hr = 2.21 lb/hr
2.21 lb/hr * 500 hr/yr * 0.0005 ton/lb = 0.55 ton/yr

CO Emissions:

Emission Factor: 3,720 lb/MMscf (AP-42, Table 3.2-3, 7/00)
Calculations: 3,720 lb/MMscf * 0.001 MMscf/MMBtu * 1 MMBtu/hr = 3.72 lb/hr
3.72 lb/hr * 500 hr/yr * 0.0005 ton/lb = 0.93 ton/yr

VOC Emissions:

Emission Factor: 29.6 lb/MMscf (AP-42, Table 3.2-3, 7/00)
Calculations: 29.6 lb/MMscf * 0.001 MMscf/MMBtu * 1 MMBtu/hr = 0.03 lb/hr
0.03 lb/hr * 500 hr/yr * 0.0005 ton/lb = 7.4 E-03 ton/yr

SO_2 Emissions:

Emission Factor: 0.588 lb/MMscf (AP-42, Table 3.2-3, 7/00)
Calculations: 0.588 lb/MMscf * 0.001 MMscf/MMBtu * 1 MMBtu/hr = 5.88 E-04 lb/hr
5.88 E-04 lb/hr * 500 hr/yr * 0.0005 ton/lb = 1.47 E-04 ton/yr

PM_{10} Emissions:

Emission Factor: 9.5 lb/MMscf (AP-42, Table 3.2-3, 7/00)
Calculations: 9.5 lb/MMscf * 0.001 MMscf/MMBtu * 1 MMBtu/hr = 9.5 E-03 lb/hr
9.5 E-03 lb/hr * 500 hr/yr * 0.0005 ton/lb = 2.37 E-03 ton/yr

V. Existing Air Quality

The Blaine County #4 Compressor Station is located in the SW¼ of Section 8, Township 33 North, Range 19 East, of Blaine County, Montana. Blaine County is unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

VI. Air Quality Impacts

Based on the information provided and the conditions established in MAQP #3060-06, the amount of controlled emissions generated by this facility would not be expected to exceed any set ambient air quality standards. The conditions in MAQP #3060-06 will be protective of air quality while the engine is operating at locations not located in or within 10 km of certain PM_{10} nonattainment areas. Any effects to air quality would be expected to be minor and short-lived.

VII. Ambient Air Impact Analysis

The Department previously determined that there are no nonattainment areas within a reasonable distance of the site and that the impact from the Blaine County #4 Compressor Station will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standards.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
		7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Skye Hatten
Date: March 25, 2010